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ABSTRACT OF THE DISCLOSURE

A multi-layer vertical comb-drive actuator includes a first comb structure having a plurality of first comb fingers and a second comb structure having a plurality of second comb fingers, wherein the first and second comb fingers The first and second comb substantially interdigitated. fingers may include two or more stacked conductive layers electrically isolated from each other by an insulating layer or an air gap. Alternatively, either the first or second comb fingers may include only one conductive layer. An application of a voltage between the first and second comb fingers causes the second comb structure to move relative to the first comb present invention includes a 2D-gimble The structure. configuration to rotate a movable element along two axis.